

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A channel allocation method for a CDMA communications network comprising:

establishing a preferred group of spreading codes and a non-preferred group of spreading codes;

determining ~~a~~ the mobility of a user of said CDMA communications network; and

assigning said user a spreading code selected from one of said preferred group of spreading codes and said non-preferred group of spreading codes based on said user's mobility.

2. (Original) The channel allocation method of claim 1 wherein determining said mobility of said user of said CDMA communications network comprises determining a Doppler frequency of a channel used by said user.

3. (Previously Presented) The channel allocation method of claim 2 wherein assigning said user a spreading code comprises assigning said user a spreading code selected from said non-preferred set of spreading codes based on said Doppler frequency.

4. (Previously Presented) The channel allocation method of claim 3 wherein assigning said user a spreading code selected from said non-preferred set of spreading codes based on said Doppler frequency comprises assigning a non-preferred spreading code to said user if said Doppler frequency is less than a predetermined threshold.

5. (Previously Presented) The channel allocation method of claim 2 wherein assigning said user a spreading code comprises assigning said user a spreading code selected from said preferred set of spreading codes based on said Doppler frequency.

6. (Previously Presented) The channel allocation method of claim 5 wherein assigning said user a spreading code selected from said preferred set of spreading codes based on said Doppler frequency comprises assigning a preferred spreading code to said user if said Doppler frequency exceeds a predetermined threshold.

7. (Previously Presented) The channel allocation method of claim 1 further comprising reassigning a user originally assigned a spreading code selected from one of said preferred and non-preferred groups of spreading codes to a spreading code selected from the other of said preferred and non-preferred groups of spreading codes.

8. (Previously Presented) The channel allocation method of claim 7 wherein reassigning a user comprises reassigning a user originally assigned to a spreading code selected from said non-preferred set of spreading codes to a spreading code selected from said preferred set of spreading codes if a spreading code from said preferred set of spreading codes is available.

9. (Currently Amended) The channel allocation method of claim 7 wherein reassigning a user comprises reassigning a user originally assigned to a spreading code selected from said preferred set of spreading codes to a spreading code selected from said [[a]]non-preferred set of spreading codes to make said preferred spreading code available to another user.

10. (Currently Amended) A base station in a CDMA communications network comprising:

a base transceiver system comprising at least one transceiver for communicating with mobile terminals; and

a base station controller configured to establish a preferred group of spreading codes and a non-preferred group of spreading codes and to assign spreading codes selected from one of said preferred and non-preferred groups of spreading codes to users of said CDMA communications network, wherein said base station controller is operative to determine a the-mobility of users of said CDMA communications network, and to assign a spreading code selected from at least one of said preferred and non-preferred groups of spreading codes to at least one of said users based on said at least one user's mobility.

11. (Previously Presented) The base station according to claim 10 wherein said base station controller determines said mobility of said users by determining a Doppler frequency of channels used by said users.

12. (Previously Presented) The base station according to claim 11 wherein said base station controller assigns spreading codes selected from said set of non-preferred spreading codes to selected users where said Doppler frequency meets predetermined conditions.

13. (Original) The base station according to claim 12 wherein said base station controller assigns spreading codes selected from said set of non-preferred spreading codes to selected users where said Doppler frequency is less than a predetermined threshold Doppler frequency.

14. (Previously Presented) The base station according to claim 13 wherein said base station controller assigns spreading codes selected from said set of preferred spreading codes to selected users where said Doppler frequency fails to meet said predetermined conditions.

15. (Currently Amended) The base station according to claim 14 wherein said base station controller assigns spreading codes selected from said set of preferred spreading codes to selected users where said Doppler frequency is greater than said [[a]]predetermined threshold Doppler frequency.

16. (Previously Presented) The base station of claim 10 where said base station controller is further operative to reassign users originally assigned a spreading code selected from one of said preferred and non-preferred groups of spreading codes to a spreading code selected from the other of said preferred and non-preferred groups of spreading codes.

17. (Previously Presented) The base station of claim 16 where said base station controller is further operative to reassign users originally assigned to spreading codes selected from said non-preferred set of spreading codes to spreading codes selected from said preferred set of spreading codes when spreading codes from said preferred set of spreading codes are available.

18. (Previously Presented) The base station of claim 16 where said base station controller is further operative to reassign users originally assigned spreading codes selected from said preferred set of spreading codes to a spreading code selected from said non-preferred set of spreading codes to make said preferred spreading code available to another user.

19. (Currently Amended) A method of managing channels in use by one or more mobile terminals in a CDMA communications system, said method comprising:

establishing a preferred set of spreading codes and a non-preferred set of spreading codes;

assigning users to at least one spreading code selected from said preferred set of spreading codes if available; and

assigning selected users to at least one spreading code selected from said non-preferred set of spreading codes when a ~~the~~ demand for spreading codes exceeds the number of spreading codes in said preferred set of spreading codes, wherein said users assigned non-preferred spreading codes are selected based on a ~~the~~ mobility of said users.

20. (Original) The method of claim 19 further comprising determining mobility of users by determining a Doppler frequency of channels used by said users.

21. (Original) The method of claim 20 wherein assigning selected users to at least one spreading code selected from said non-preferred set of spreading codes when the demand for spreading codes exceeds the number of spreading codes in said preferred set of spreading codes comprises selecting users assigned to said non-preferred spreading codes based on said Doppler frequency.

22. (Original) The method of claim 19 further comprising reassigning users originally assigned to a non-preferred spreading code to a preferred spreading code if a spreading code from said preferred set of spreading codes is available.

23. (Original) The method of claim 19 further comprising reassigning a user originally as signed to a preferred spreading code to a non-preferred spreading code to make said preferred spreading code available to a new user.